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10/594,425	09/26/2006	Shinichi Yanagishita	038921.58288US	3254

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EXAMINER

MURDOCH, CRYSTAL A

ART UNIT	PAPER NUMBER
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2628

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,425	Applicant(s) YANAGISHITA ET AL.	
	Examiner Crystal Murdoch	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

I. Response to Arguments

Applicants' response to the last Office Action, mailed 14 July 2008 has been entered and made of record.

The rejections of claims 5-6 are withdrawn in view of Applicant's cancellation of those claims.

Applicant's amendments to independent claims 1 and 3 require new grounds of rejection. New grounds of rejection are provided in the Office Action below.

Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new grounds of rejection.

II. Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

A. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 3 recite the limitation "the three-dimensional CAD system."

There is insufficient antecedent basis for this limitation in the claims.

III. Specification

A. Abstract

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains more than 150 words. Correction is required. See MPEP § 608.01(b).

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B. Claim Objections

Claim 1 is objected to because it recites, "... drawing frame data for every application uses." Claim 3 is objected to because it recites, "... based on the selection using on a screen..." Appropriate correction is required.

IV. Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

A. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al. (US Patent Number 5,692,115, herein referred to as Itoh).

Regarding independent claims 1 and 3, Itoh teaches an automatic two-dimensional drawing creation system and method for generating a two-dimensional drawing in accordance with a three-dimensional model using a computer source having a processing device source (See Itoh: Fig. 1, Item 320; Col. 5, Line 14, "... a drawing rule execution means 320..."), a memory source (See Itoh: Fig. 1, Item 170; Col. 5, Lns. 16-20, "The object model storage means 170 stores three-dimensional model data representing an object and also stores feature classification data for specifying features of this three-dimensional model data."), an input device (See Itoh: Col. 3, Lns. 58-60, "The common storage unit stores the

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model data and the drawing rules, and each 110 unit can then permit a corresponding user to select an appropriate viewing angle, etc.”) and an interface (See Itoh: Fig. 7(a); Col. 7, Lns. 9-12, “(1) Firstly, a window, for assisting the user to input data and viewing direction data, is displayed on the screen of the two-dimensional data output means 100 as shown in FIG.7(a).”), the system comprising:

- An extracting means that extracts a designated drawing frame from a drawing frame data base that stores drawing frame data for every application use (See Itoh: Fig. 1, Item 120; Col. 5, Lns. 25-29, “The viewing direction setting means 120 is used by a user to select a viewing direction in which the three-dimensional model of the object is to be viewed, and the direction setting means then generates appropriate data indicating the selected viewing direction.”);
- A projection means that projects a three-dimensional model extracted from a three-dimensional model data base to a predetermined position of the extracted drawing frame (See Itoh: Col. 5, Lns. 33-47, “The drawing rule selection means 310 selects the relevant drawing rule from the drawing rule storage means 400 on the basis of the data specifying the viewing direction which is input by the viewing direction setting means 120 and the feature classification data corresponding to the three-dimensional data which is read from the object model storage means 170. The drawing rule execution means

- 320 then generates two-dimensional data consisting of two-dimensional characters and graphics according to the drawing rule procedure which is selected by the drawing rule selection means 310. Finally, the two-dimensional data output means 100 outputs two-dimensional data which is processed by the drawing rule execution means 320 to generate an image.”) based on the selection from a screen a selection between a front and a plan view (See Itoh: Figs. 14(a)-14(b); Col. 9, Lns. 1-6, “FIGS. 14(a) and 14(b) show an example in which a plurality of viewing directions are specified for one drawing use. In the example, the ‘top view’ and ‘front view’ of the three-dimensional model shown in FIG. 14(a) is prepared for ‘for design’, so that there are two images generated, as shown in FIG. 14(b).”);
- A selecting means that selects dimension line elements in accordance with a shape code stored together with the three dimensional model in the three-dimensional model data base (See Itoh: Figs. 14(b), 15(b), and 16(b) wherein the dimension line is the line with an arrow on each end.);
 - A selecting and adding means that selects only necessary dimension line elements in the two-dimensional projection drawing from the selected dimension line elements in accordance with a selection of a direction (See Itoh: Col. 3, Lns. 43-49, “For example, some features, or some parts of a feature, may be so small that the relevant information

cannot be seen when an image of the whole object is generated. Therefore, the present invention also provides an arrangement in which a part of the image can be and then the drawing rules used to produce an appropriate visual representation of the feature or features of that part of the image.”); and

- A compounding means that arranges a compounded drawing on the drawing frame file including the two-dimensional projection drawing wherein only the necessary dimension line elements of the selected dimension line elements are included in the two-dimensional projection drawing (See Itoh: Figs. 14(b), 15(b), and 16(b); Col. 2, Lns. 37-45, “To avoid this manual step, the present invention therefore proposes that drawing rules be stored, for a feature of an object. Each design rule then corresponds to a predetermined visual appearance or presentation of the feature (for example, the conventional representation of that feature in production drawings) when the feature is viewed from a predetermined viewing direction. Then, the drawing rule is used in conjunction with the model data to generate a complete two-dimensional image.”).

Regarding claims 2 and 4, as they depend from claims 1 and 3, respectively, Itoh teaches:

- The system includes a design reference database that stores data of tolerance values concerning each of the dimension line elements and remarks (See Itoh: Figs. 14(b), 15(b), and 16(b)), and
- The compounding means extracts designated tolerance values and remarks from the design reference data base and describes them at designated positions on the two-dimensional projection drawing when the deformed only the necessary dimension line elements and the two-dimensional projection drawing are compounded (See Itoh: Figs. 14(b), 15(b), and 16(b); Col. 2, Lns. 37-45, "To avoid this manual step, the present invention therefore proposes that drawing rules be stored, for a feature of an object. Each design rule then corresponds to a predetermined visual appearance or presentation of the feature (for example, the conventional representation of that feature in production drawings) when the feature is viewed from a predetermined viewing direction. Then, the drawing rule is used in conjunction with the model data to generate a complete two-dimensional image.").

V. Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal Murdoch whose telephone number is (571) 270-1043. The examiner can normally be reached on Mon. - Fri. 10:00 am to 6:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Crystal Murdoch/
Examiner, Art Unit 2628

/Kee M Tung/
Supervisory Patent
Examiner, Art Unit 2628